

AMENDMENTS TO THE CLAIMSRECEIVED
CENTRAL FAX CENTER

APR 01 2008

The following listing of claims replaces all prior versions:

1. - 17. (Cancelled)

18. (Currently Amended) An apparatus comprising:

a skin of a computing device, said skin comprising a conductive material;

and

a first slot in the skin, ~~said slot comprising a slot antenna;~~a first directional element coupled to the first slot beneath the skin,~~wherein the slot antenna comprises to form a first sector slot antenna having a~~first directional radiation pattern; ~~pattern, wherein the sector slot antenna~~~~comprises a first sector slot antenna in a sector antenna system, said sector antenna system further comprising:~~~~a second sector slot antenna in the skin, said in the skin; and~~a second directional element coupled to the second slot beneath the skinfor form a second sector slot antenna having a second directional radiationpattern in a different direction than the first sector slot antenna, said first sectorslot antenna and said second sector slot antenna together comprising a sectorantenna system.

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19. (Previously Presented) The apparatus of claim 18, said sector antenna system further comprising:

a plurality of additional sector slot antennas in the skin, each of the plurality of additional sector slot antennas having a directional radiation pattern covering a different sector surrounding the computing device.

20. (Previously Presented) The apparatus of claim 18 wherein the first sector slot antenna has the directional radiation pattern for multiple resonant frequency bands.

21. (Currently Amended) The apparatus of claim 18 further comprising:

a tuning element coupled to the first slot, said tuning element to tune a secondary frequency for the first sector slot antenna.

22. (Original) The apparatus of claim 21 wherein the tuning element comprises a stub capacitor.

23. (Previously Presented) The apparatus of claim 18 further comprising:

a third sector slot antenna having a same directional radiation pattern as the first sector slot antenna, said first sector slot antenna and said third sector slot antenna comprising a diversity antenna.

24. - 28. (Cancelled)

29. (Currently Amended) A system comprising:

a notebook computer;

a skin covering at least a portion of the notebook computer, said skin comprising a conductive material; and

~~_____ a slot in the skin, said slot comprising a slot antenna, wherein the slot antenna comprises a sector slot antenna having a directional radiation pattern, wherein the sector slot antenna comprises a first sector slot antenna in a sector antenna system, said sector antenna system further comprising:~~

~~_____ a second sector slot antenna in the skin, said second sector slot antenna having a directional radiation pattern in a different direction than the first sector slot antenna.~~

~~_____ a first slot in the skin;~~

~~_____ a first directional element coupled to the first slot beneath the skin to form a first sector slot antenna having a first directional radiation pattern;~~

~~_____ a second slot in the skin; and~~

~~_____ a second directional element coupled to the second slot beneath the skin for form a second sector slot antenna having a second directional radiation pattern in a different direction than the first sector slot antenna, said first sector slot antenna and said second sector slot antenna together comprising a sector antenna system.~~

30. (Previously Presented) The system of claim 29, said sector antenna system further comprising:

a plurality of additional sector slot antennas in the skin, each of the plurality of additional sector slot antennas having a directional radiation pattern covering a different sector surrounding the notebook computer.

31. (Previously Presented) The system of claim 29 further comprising:

a third sector slot antenna having a same directional radiation pattern as the first sector slot antenna, said first sector slot antenna and said third sector slot antenna comprising a diversity antenna.

32. - 33. (Cancelled)

34. (Currently Amended) The apparatus of claim 18 wherein the conductive material comprises an outer layer of the skin in at least a vicinity of the slot of the first sector slot antenna.

35. (Previously Presented) The apparatus of claim 34 wherein the outer layer comprises one of a conductive coating and a conductive mesh.

36. (Currently Amended) The apparatus of claim 34 wherein the ~~slot of the first sector slot antenna~~ extends through only the outer layer.

37. (Currently Amended) The apparatus of claim 34 wherein the ~~slot of the first sector-slot antenna~~ extends through multiple layers of the skin.

38. (Previously Presented) The apparatus of claim 18 wherein the skin is made entirely of the conductive material.

39. (Previously Presented) The apparatus of claim 18 wherein the computing device comprises one of a notebook computer, a tablet computer, and a handheld computer.

40. (Currently Amended) The apparatus of claim 18 wherein the computing device comprises at least one of a base and a lid, and wherein the ~~slot of the first sector-slot antenna~~ is located in at least one of an edge of the base, an edge of the lid, an outside of the lid, and an inside of the lid, ~~through the lid, and through the base.~~

41. (Currently Amended) The apparatus of claim 18 wherein the first directional element comprises, ~~said first sector slot antenna comprising a cavity behind the slot~~, said cavity having a depth of approximately one-quarter of a wavelength of a resonant frequency of the first sector slot antenna.

42. (Currently Amended) The apparatus of claim 18 wherein the first directional element comprises, ~~said first sector slot antenna comprising an impedance plane coupled to the skin under the slot of the first sector slot antenna.~~

43. (Previously Presented) The apparatus of claim 42 wherein the impedance plane comprises an Artificial Magnetic Conductor (AMC).

44. (Previously Presented) The apparatus of claim 42 wherein the impedance plane comprises a multiple band impedance plane, said multiple band impedance plane to act as a magnetic conductor for a primary resonant frequency and a secondary resonant frequency of the slot.

45. (Previously Presented) The apparatus of claim 18 wherein the first sector slot antenna has a primary resonant frequency and a secondary resonant frequency.

46. (Previously Presented) The apparatus of claim 45 wherein the primary resonant frequency and the secondary resonant frequency are tuned for two different wireless communications standards.

47. (Previously Presented) The apparatus of claim 46 wherein the two wireless communications standards comprise at least one of Bluetooth, 802.11a, 802.11b, and 802.11g.

48. (Currently Amended) The apparatus of claim 18 wherein at least one of a thickness of the skin in a vicinity of the first slot, a width of the first slot, a length of the first slot, and a tuning element at a feed point of the first slot are tuned to achieve at least one of a target impedance and a primary resonant frequency of the first slot.

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